

Amendments to the Claims:

The following listing of claims will replace all prior versions and listings of claims.

Listing of Claims

- 1-21. (Canceled)
22. (Currently amended) An isolated polynucleotide comprising the nucleic acid sequence of ~~ORF ID 1 of Contig ID 51, represented by~~ nucleotides 984 to 2066 of SEQ ID NO:51.
23. (Previously presented) The isolated polynucleotide of claim 22, wherein said polynucleotide comprises a heterologous polynucleotide sequence.
24. (Previously presented) The isolated polynucleotide of claim 23, wherein said heterologous polynucleotide sequence encodes a heterologous polypeptide.
25. (Previously presented) A method for making a recombinant vector comprising inserting the isolated polynucleotide of claim 22 into a vector.
26. (Previously presented) A nucleic acid sequence complementary to the polynucleotide of claim 22.
27. (Previously presented) A recombinant vector comprising the isolated polynucleotide of claim 22.
28. (Previously presented) The recombinant vector of claim 27, wherein said polynucleotide is operably associated with a heterologous regulatory sequence that controls gene expression.
29. (Previously presented) A recombinant host cell comprising the isolated polynucleotide of claim 22.
30. (Previously presented) The recombinant host cell of claim 29, wherein said polynucleotide is operably associated with a heterologous regulatory sequence that controls gene expression.
31. (Currently amended) An isolated polynucleotide for the detection of *Borrelia burgdorferi*, wherein said isolated polynucleotide comprises at least 50 contiguous nucleotides

of the nucleic acid sequence of ORF ID 1 of Contig ID 51, represented by nucleotides 984 to 2066 of SEQ ID NO:51.

32. (Previously presented) The isolated polynucleotide of claim 31, wherein said polynucleotide comprises a heterologous polynucleotide sequence.

33. (Previously presented) The isolated polynucleotide of claim 32, wherein said heterologous polynucleotide sequence encodes a heterologous polypeptide.

34. (Previously presented) A method for making a recombinant vector comprising inserting the isolated polynucleotide of claim 31 into a vector.

35. (Previously presented) A nucleic acid sequence complementary to the polynucleotide of claim 31.

36. (Previously presented) A recombinant vector comprising the isolated polynucleotide of claim 31.

37. (Previously presented) The recombinant vector of claim 36, wherein said polynucleotide is operably associated with a heterologous regulatory sequence that controls gene expression.

38. (Previously presented) A recombinant host cell comprising the isolated polynucleotide of claim 31.

39. (Previously presented) The recombinant host cell of claim 38, wherein said polynucleotide is operably associated with a heterologous regulatory sequence that controls gene expression.

40. (Currently amended) A method for detecting *Borrelia burgdorferi* by nucleic acid hybridization or PCR, comprising:

- (a) contacting a biological sample with the isolated polynucleotide of claim 22; and
- (b) detecting the presence or absence of *Borrelia burgdorferi* in the sample.

41. (Currently amended) A method for detecting *Borrelia burgdorferi* by nucleic acid hybridization or PCR, comprising:

- (a) contacting a biological sample with the isolated polynucleotide of claim 31; and
- (b) detecting the presence or absence of *Borrelia burgdorferi* in the sample.